

Remarks

The Office Action dated August 5, 2010, has been received and carefully noted. The above amendments and the following remarks are being submitted as a full and complete response thereto. Claims 11-22 are pending. By this Amendment, Claim 11 is amended. Support for the amendments to the claims can be found on at least page 10, paragraphs [0044] to [0045], and Figure 7 of the application as originally filed. The Applicants respectfully submit that no new matter is presented herein.

Claim Rejection – 35 U.S.C. § 112

Claims 11-22 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office Action states that the Examiner is unclear as to what the following language in Claim 11 means: “to permit the engine to operate in an all-cylinder operational state.”

The Applicants respectfully submit that Claim 11 has been amended in a manner believed to be responsive to the rejection. Accordingly, the Applicants respectfully request withdrawal of the rejection.

Claim Rejection -- 35 U.S.C. 103

Claims 11-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,422,546 B1 to Nemoto et al. (Nemoto) in view of US Patent No. 6,427,662 to Tanaya et al. (Tanaya). Applicants respectfully traverse the rejection for at least the following reason(s).

Claim 11 recites a feature wherein when an abnormality in an operational state of said active anti-vibration supporting device is detected, if the engine is in a cylinder-

suspended state, the cylinder suspension of the engine is prohibited and the engine restored to a state where all cylinders are operating, and if the engine is not in a cylinder-suspended state, switching to the cylinder-suspended state is prohibited.

The Office Action admits that Nemoto fails to teach wherein a cylinder suspension of the engine is prohibited to permit the engine to operate in an all-cylinder operational state when an abnormality in an operational state of an active anti-vibration supporting device is detected. The Office Action once again cites Tanaya in combination with Nemoto to reject Claim 11. In particular, the Office Action alleges that the "knock control" taught by Tanaya corresponds to the active anti-vibration supporting device recited by Claim 11 of the present invention. As asserted on page 4 of the Office Action, Tanaya discloses "a knock control apparatus with a detector for extracting a vibration in the event that the frequency of abnormalities exceeds a predetermined value, the knock control is prohibited, knock detection can be made even immediately following noise, and further knock control is prohibited when judgment is made that the abnormality detected is not an instantaneous abnormality, so the engine can be operated in a safer manner (col. 9, lines 6-15)." However, Tanaya does not teach or suggest, and the Office Action is completely silent with respect to addressing, the feature of Claim 11 wherein if an abnormality is detected in the anti-vibration supporting device (i.e., the knock control) when the engine is in a cylinder-suspended state, the cylinder suspension of the engine is prohibited and the engine restored to a state where all cylinders are operating, and if the engine is not in a cylinder-suspended state, switching to the cylinder-suspended state is prohibited. As cited by the Office Action, Tanaya teaches prohibiting the knock control when the frequency of abnormalities

exceeding a predetermined value is detected at the time of knock detection (see page 4, lines 2-7 of the Office Action). Tanaya does not teach or suggest prohibiting the suspension of the engine cylinders when an abnormality is detected in the knock control.

In the case wherein an engine can be switched between two states, one in which all of the cylinders are operating and another in which at least one of the cylinders is suspended (i.e., a cylinder-suspended state), the present invention, as recited in Claim 11, prohibits operating in the cylinder-suspended state when an abnormality in an operational state of the active anti-vibration supporting device is detected. Operating the engine in a state with all cylinders operating provides lower vibration, which suppresses the load on the active anti-vibration supporting device, and which can be particularly beneficial when an abnormality is detected in the anti-vibration supporting device. Thus, rather than prohibiting knock control when an abnormality is detected in the engine, as appears to be the argument being made with respect to Tanaya, it is when the anti-vibration support device is functioning abnormally that the cylinder-suspended state is prohibited to avoid the larger vibrations that may be produced by the engine in the cylinder-suspended state. Contrary to Tanaya, the engine in the present invention may be operating perfectly normal.

For at least the reason(s) provided above, Applicants respectfully submit that Nemoto and Tanaya, alone or in combination, do not teach or suggest the invention recited in Claim 11. As such, Applicants respectfully submit that one of ordinary skill in the art would not find it obvious to modify Nemoto according to the teachings of Tanaya,

since doing so would not arrive at the invention recited by Claim 11. Accordingly, Claim 11 should be deemed allowable over Nemoto and Tanaya.

Claims 12-22 depend from Claim 11. It is respectfully submitted that these dependent claims are allowable for at least the same reasons that Claim 11 is allowable, as well as for the additional subject matter recited therein.

Applicants respectfully request withdrawal of the rejections.


Conclusion

In view of the foregoing, Applicants respectfully request reconsideration of the application, withdrawal of the outstanding rejections, allowance of Claims 11-22, and the prompt issuance of a Notice of Allowability.

Should the Examiner believe anything further is desirable in order to place this application in better condition for allowance, the Examiner is requested to contact the undersigned at the telephone number listed below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension, together with any additional fees that may be due with respect to this paper, may be charged to counsel's Deposit Account No. 01-2300, **referencing attorney docket number 107348-00393.**

Respectfully submitted,



William D. Doyle
Registration No. 60,429

Customer No. 004372
ARENT FOX LLP
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000
Fax: (202) 638-4810